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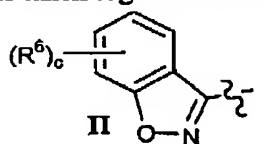
Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 has been canceled.

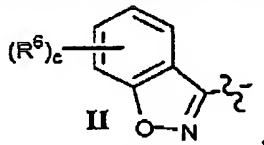
2. (previously presented) The composition of Claim 56 wherein  $R^1$  is selected from:

- (A) aryl;
- (B) substituted aryl, wherein the substituents on said substituted aryl are selected from: (1) halo; or (2) alkyl; or (3) substituted alkyl;
- (C) heteroaryl;
- (D) substituted heteroaryl; or
- (E) when  $R^1$  is taken together with X, then the moiety is



3. (previously presented) The composition of Claim 2 wherein  $R^1$  is selected from:

- (A) phenyl;
- (B) substituted phenyl wherein the substituents on said substituted phenyl are selected from: (1) halo; (2) alkyl; (3) alkyl substituted with halo;
- (C) heteroaryl selected from: pyridyl, thienyl, pyrimidinyl, thiazolyl or pyridyl N-Oxide;
- (D) alkyl substituted thiazolyl; or
- (E) when  $R^1$  is taken together with X, then the moiety is



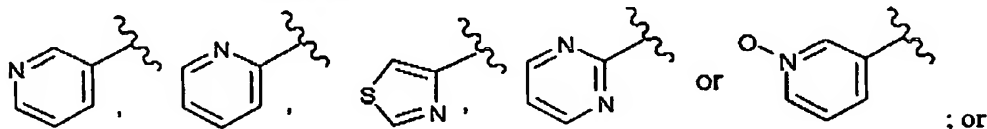
wherein c is 0 or 1, and when c is 1 then  $R^6$  is halo.

4. (previously presented) The composition of Claim 3 wherein  $R^1$  is selected from:

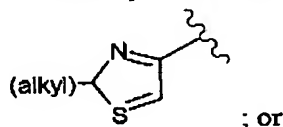
- (A) phenyl;

(B) substituted phenyl, wherein the substituents on said substituted phenyl are independently selected from: chloro, fluoro or trifluoromethyl;

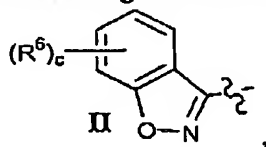
(C) heteroaryl selected from:



(D) substituted heteroaryl of the formula:



(E) when R<sup>1</sup> is taken together with X, then the moiety is



wherein c is 0 or 1, and when c is 1 then R<sup>6</sup> is fluoro.

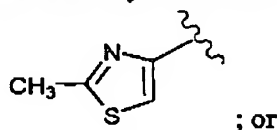
5. (previously presented) The composition of Claim 56 wherein R<sup>1</sup> is selected from:

(A) phenyl;

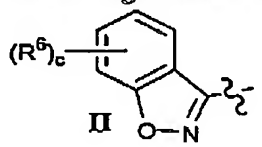
(B) substituted phenyl, wherein the substituents on said substituted phenyl are independently selected from: chloro, fluoro or trifluoromethyl;

(C) pyridyl; or

(D) substituted heteroaryl of the formula:



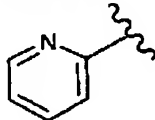
(E) when R<sup>1</sup> is taken together with X, then the moiety is



wherein c is 0 or 1, and when c is 1 then R<sup>6</sup> is fluoro.

6. (previously presented) The composition of Claim 5 wherein R<sup>1</sup> is pyridyl.

7. (previously presented) The composition of Claim 6 wherein  $R^1$  is



8. (previously presented) The composition of Claim 56 wherein X is  $=C(NOR^3)$ , and  $R^3$  is selected from H or alkyl.

9. (previously presented) The composition of Claim 8 wherein  $R^3$  is selected from H, methyl or ethyl.

10. (previously presented) The composition of Claim 9 wherein  $R^3$  is methyl.

11. (previously presented) The composition of claim 56 wherein: (1)  $M^2$  is nitrogen; and (2)  $M^3$  and  $M^4$  are selected such that: (a) one is carbon and the other is nitrogen, or (b) both are nitrogen.

12. (previously presented) The composition of Claim 11 wherein  $M^3$  is carbon, and  $M^4$  is nitrogen.

13. (previously presented) The composition of Claim 56 wherein:

n is 2;

a is 0 or 1;

b is 0 or 1;

c is 0 or 1, and when c is 1 then  $R^6$  is halo;

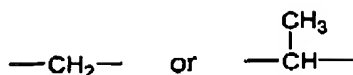
e is 1 to 5; and

p is 2.

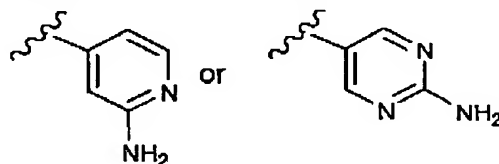
14. (previously presented) The composition of Claim 56 wherein Y is  $=C(O)$ .

15. (previously presented) The composition of Claim 56 wherein Z is  $C_1$  to  $C_3$  alkyl.

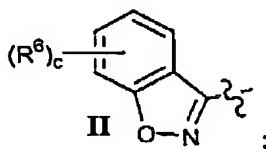
16. (previously presented) The composition of Claim 56 wherein Z is



17. (previously presented) The composition of Claim 56 wherein  $\text{R}^2$  is a six membered heteroaryl ring.
18. (previously presented) The composition of Claim 17 wherein  $\text{R}^2$  is selected from pyridyl, pyridyl substituted with  $-\text{NR}^4\text{R}^5$ , pyrimidinyl, or pyrimidinyl substituted with  $-\text{NR}^4\text{R}^5$ .
19. (previously presented) The composition of Claim 18 wherein  $\text{R}^2$  is pyridyl substituted with  $-\text{NH}_2$ , or pyrimidinyl substituted with  $-\text{NH}_2$ .
20. (previously presented) The composition of Claim 19 wherein  $\text{R}^2$  is



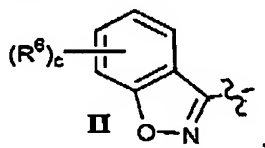
21. (previously presented) The composition of Claim 56 wherein  $\text{R}^4$  is H or lower alkyl;  $\text{R}^5$  is H,  $\text{C}_1$  to  $\text{C}_6$ alkyl, or  $-\text{C}(\text{O})\text{R}^4$ ;  $\text{R}^{12}$  is alkyl, hydroxy or fluoro; and  $\text{R}^{13}$  is alkyl, hydroxy or fluoro.
22. (previously presented) The composition of Claim 21 wherein  $\text{R}^4$  is H or methyl;  $\text{R}^5$  is H or methyl;  $\text{R}^{12}$  is hydroxy or fluoro; and  $\text{R}^{13}$  is hydroxy or fluoro.
23. (previously presented) The composition of Claim 56 wherein:
- (1)  $\text{R}^1$  is selected from:
    - (A) aryl;
    - (B) substituted aryl, wherein the substituents on said substituted aryl are selected from: (1) halo; or (2) alkyl; or (3) substituted alkyl;
    - (C) heteroaryl; or
    - (D) substituted heteroaryl; or
    - (E) when  $\text{R}^1$  is taken together with X, then the moiety is



- (2) X is =C(NOR<sup>3</sup>);
- (3) R<sup>3</sup> is selected from H or alkyl;
- (4) M<sup>2</sup> is nitrogen;
- (5) Y is =C(O);
- (6) M<sup>3</sup> and M<sup>4</sup> are selected such that: (1) one is carbon and the other is nitrogen, or (2) both are nitrogen;
- (7) Z is C<sub>1</sub> to C<sub>3</sub> alkyl; and
- (8) R<sup>2</sup> is a six membered heteroaryl ring.

24. (previously presented) The composition of Claim 23 wherein:

- (1) R<sup>1</sup> is selected from:
  - (A) phenyl;
  - (B) substituted phenyl wherein the substituents on said substituted phenyl are selected from: (1) halo; (2) alkyl; (3) alkyl substituted with halo;
  - (C) heteroaryl selected from: pyridyl, thienyl, pyrimidinyl, thiazolyl or pyridyl N-Oxide; or
  - (D) alkyl substituted thiazolyl; or
  - (E) when R<sup>1</sup> is taken together with X, then the moiety is



wherein c is 0 or 1, and when c is 1 then R<sup>6</sup> is halo;

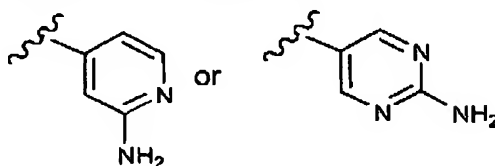
- (2) R<sup>3</sup> is selected from H, methyl or ethyl;
- (3) n is 2,
- (4) a is 0 or 1,
- (5) b is 0 or 1,
- (6) c is 0 or 1 and when c is 1 then R<sup>6</sup> is halo,
- (7) e is 1 to 5,
- (8) p is 2,
- (9) R<sup>4</sup> is H or lower alkyl,

(10)  $R^5$  is H,  $C_1$  to  $C_6$ alkyl, or  $-C(O)R^4$ ;

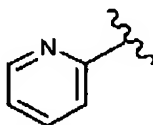
(11)  $R^{12}$  is alkyl, hydroxy or fluoro, and

(12)  $R^{13}$  is alkyl, hydroxy or fluoro.

25. (previously presented) The composition of Claim 24 wherein  $R^2$  is



$R^1$  is



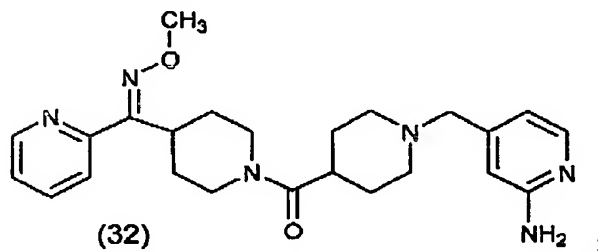
$M^2$  is nitrogen,  $M^3$  is carbon, and  $M^4$  is nitrogen.

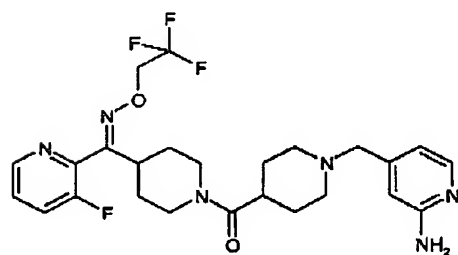
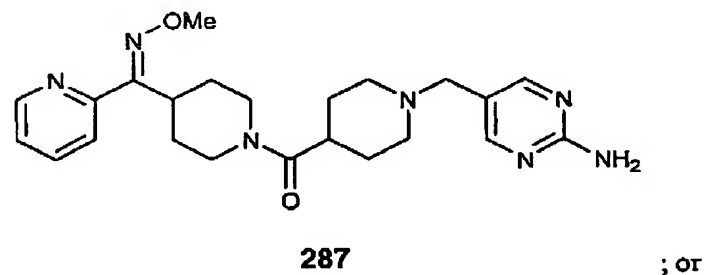
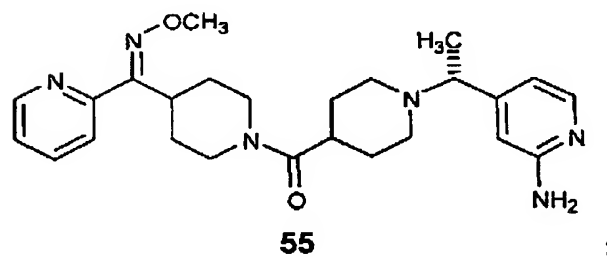
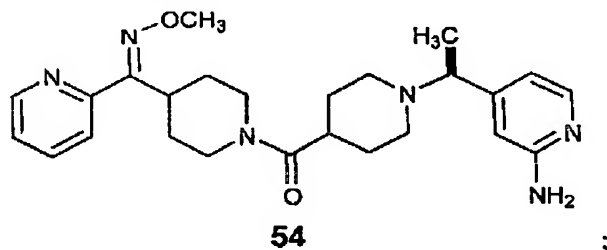
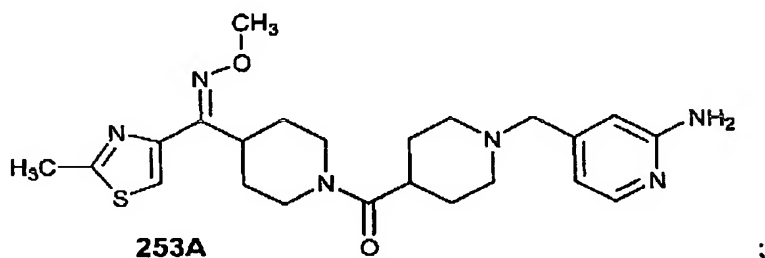
Claims 26-45 have been canceled.

46. (currently amended) The method of Claim 45 ~~57~~ wherein said  $H_1$  receptor antagonist is selected from: loratadine or descarboethoxyloratadine.

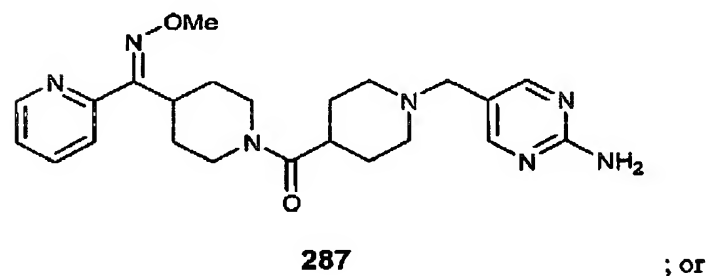
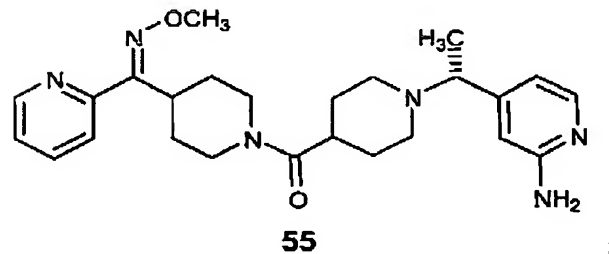
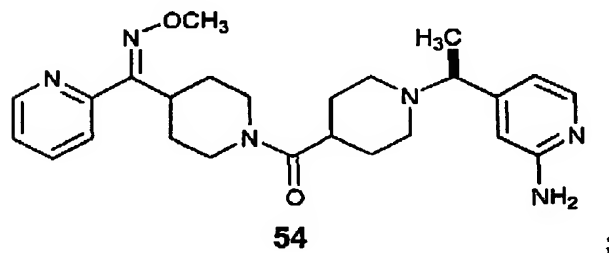
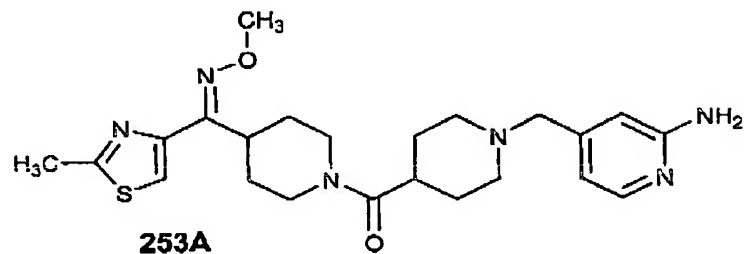
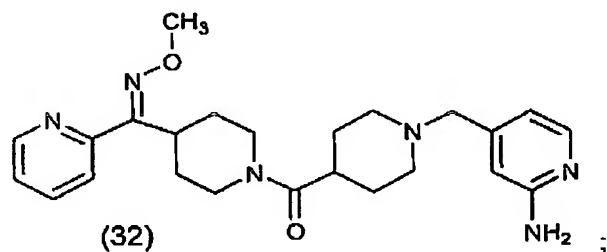
Claims 47-50 have been canceled.

51. (previously presented) A pharmaceutical composition of Claim 56, wherein said compound of formula I is selected from:



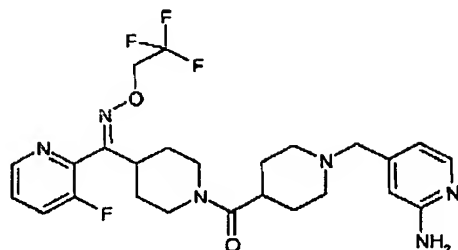


52. (previously presented) A method of Claim 57 wherein said compound of formula I is selected from:



; or

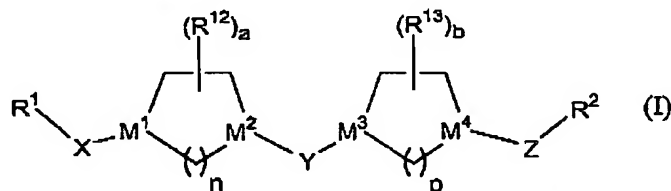




Claims 53 and 54 have been canceled.

55. (original) The method of Claim 54 wherein said  $H_1$  receptor antagonist is selected from: loratadine or descarboethoxyloratadine.

56. (currently amended) A pharmaceutical composition comprising an effective amount of a compound of the formula I:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

(1)  $R^1$  is selected from:

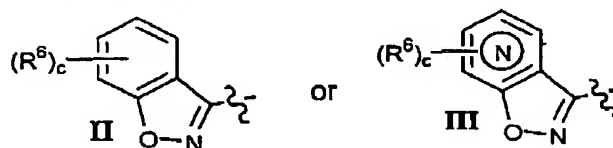
- (a) aryl;
- (b) heteroaryl;
- (c) heterocycloalkyl;
- (d) alkyl;
- (e) cycloalkyl; or
- (f) alkylaryl;

wherein said  $R^1$  groups are optionally substituted with 1 to 4 substituents independently selected from:

- (1) halogen;
- (2) hydroxyl;
- (3) lower alkoxy;
- (4)  $-CF_3$ ;
- (5)  $CF_3O-$ ;

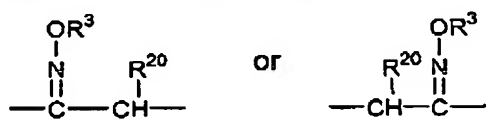
- (6)  $-NR^4R^5$ ;
- (7) phenyl;
- (8)  $-NO_2$ ,
- (9)  $-CO_2R^4$ ;
- (10)  $-CON(R^4)_2$  wherein each  $R^4$  is the same or different;
- (11)  $-S(O)_mN(R^{20})_2$  wherein each  $R^{20}$  is the same or different H or alkyl group;
- (12)  $-CN$ ; or
- (13) alkyl; or

(2)  $R^1$  and X taken together form a group selected from:



wherein  $\textcircled{N}$  represents a nitrogen atom located at one of the 4 non-fused positions of the ring;

(3) X is selected from:  $=C(O)$ ,  $=C(NOR^3)$ ,  $=C(NNR^4R^5)$ ,



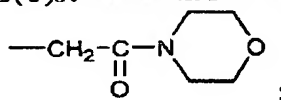
- (4)  $M^1$  is carbon;
- (5)  $M^2$  is selected from C or N;
- (6)  $M^3$  and  $M^4$  are independently selected from C or N;
- (7) Y is selected from: is  $-CH_2-$ ,  $=C(O)$ ,  $=C(NOR^{20})$  (wherein  $R^{20}$  is as defined above), or  $=C(S)$ ;

(8) Z is a  $C_1 = C_6$  alkyl group;

(9)  $R^2$  is a five or six-membered heteroaryl ring, said six-membered heteroaryl ring comprising 1 or 2 nitrogen atoms with the remaining ring atoms being carbon, and said five-membered heteroaryl ring containing 1 or 2 heteroatoms selected from: nitrogen, oxygen, or sulfur with the remaining ring atoms being carbon; said five or six membered heteroaryl rings being optionally substituted with 1 to 3 substituents independently selected from: halogen, hydroxyl, lower alkyl, lower alkoxy,  $-CF_3$ ,  $CF_3O-$ ,  $-NR^4R^5$ , phenyl,  $-NO_2$ ,  $-CO_2R^4$ ,  $-CON(R^4)_2$  wherein each  $R^4$  is the same or different,  $-CH_2NR^4R^5$ ,  $-(N)C(NR^4R^5)_2$ , or  $-CN$ ;

(10)  $R^3$  is selected from:

- (a) hydrogen;
- (b)  $C_1 - C_6$  alkyl;
- (c) aryl;
- (d) heteroaryl;
- (e) heterocycloalkyl;
- (f) arylalkyl;
- (g)  $-(CH_2)_e-C(O)N(R^4)_2$  wherein each  $R^4$  is the same or different,
- (h)  $-(CH_2)_e-C(O)OR^4$ ;
- (i)  $-(CH_2)_e-C(O)R^{30}$  wherein  $R^{30}$  is a heterocycloalkyl group, or



- (j)  $-CF_3$ ; or
- (k)  $-CH_2CF_3$ ;

wherein said aryl, heteroaryl, heterocycloalkyl, and the aryl portion of said arylalkyl are optionally substituted with 1 to 3 substituents selected from: halogen,  $-OH$ ,  $-OCF_3$ ,  $-CF_3$ ,  $-CN$ ,  $-N(R^{45})_2$ ,  $-CO_2R^{45}$ , or  $-C(O)N(R^{45})_2$ , wherein each  $R^{45}$  is independently selected from: H, alkyl, alkylaryl, or alkylaryl wherein said aryl moiety is substituted with 1 to 3 substituents independently selected from  $-CF_3$ ,  $-OH$ , halogen, alkyl,  $-NO_2$ , or  $-CN$ ;

(11)  $R^4$  is selected from: hydrogen,  $C_1 - C_6$  alkyl, aryl, alkylaryl, said aryl and alkylaryl groups being optionally substituted with 1 to 3 substituents selected from: halogen,  $-CF_3$ ,  $-OCF_3$ ,  $-OH$ ,  $-N(R^{45})_2$ ,  $-CO_2R^{45}$ ,  $-C(O)N(R^{45})_2$ , or  $-CN$ ; wherein  $R^{45}$  is as defined above;

(12)  $R^5$  is selected from: hydrogen,  $C_1 - C_6$  alkyl,  $-C(O)R^4$ ,  $-C(O)_2R^4$ , or  $-C(O)N(R^4)_2$  wherein each  $R^4$  is independently selected, and  $R^4$  is as defined above;

(13) or  $R^4$  and  $R^5$  taken together with the nitrogen atom to which they are bound forms a five or six membered heterocycloalkyl ring;

(14)  $R^6$  is selected from: alkyl, aryl, alkylaryl, halogen, hydroxyl, lower alkoxy,  $-CF_3$ ,  $CF_3O-$ ,  $-NR^4R^5$ ,  $-NO_2$ ,  $-CO_2R^4$ ,  $-CON(R^4)_2$  wherein each  $R^4$  is the same or different, or  $-CN$ ;

(15)  $R^{12}$  is selected from: alkyl, hydroxyl, alkoxy, or fluoro;

(16)  $R^{13}$  is selected from: alkyl, hydroxyl, alkoxy, or fluoro;

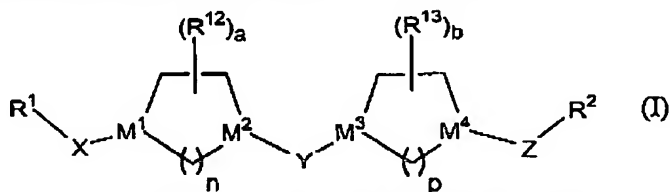
(17) a is 0 to 2;

- (18) b is 0 to 2;
- (19) c is 0 to 2;
- (20) e is 0 to 5;
- (21) m is 1 or 2;
- (22) n is 1, 2 or 3; and
- (23) p is 1, 2 or 3, with the proviso that when M<sup>3</sup> and M<sup>4</sup> are both nitrogen,

then p is 2 or 3;

and an effective amount of H<sub>1</sub> receptor antagonist, and a pharmaceutically effective carrier.

57. (previously presented) A method of treating: allergy, allergy-induced airway responses, and congestion comprising administering to a patient in need of such treatment an effective amount of a compound of formula I:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

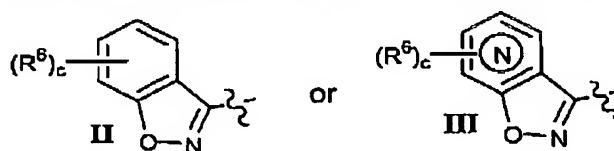
- (1) R<sup>1</sup> is selected from:
  - (a) aryl;
  - (b) heteroaryl;
  - (c) heterocycloalkyl
  - (d) alkyl;
  - (e) cycloalkyl; or
  - (f) alkylaryl;

wherein said R<sup>1</sup> groups are optionally substituted with 1 to 4 substituents independently selected from:

- (1) halogen;
- (2) hydroxyl;
- (3) lower alkoxy;
- (4) -CF<sub>3</sub>;
- (5) CF<sub>3</sub>O-;
- (6) -NR<sup>4</sup>R<sup>5</sup>;

- (7) phenyl;
- (8)  $-\text{NO}_2$ ;
- (9)  $-\text{CO}_2\text{R}^4$ ;
- (10)  $-\text{CON}(\text{R}^4)_2$  wherein each  $\text{R}^4$  is the same or different;
- (11)  $-\text{S}(\text{O})_m\text{N}(\text{R}^{20})_2$  wherein each  $\text{R}^{20}$  is the same or different H or alkyl group;
- (12)  $-\text{CN}$ ; or
- (13) alkyl; or

(2)  $\text{R}^1$  and X taken together form a group selected from:



wherein  $\textcircled{\text{N}}$  represents a nitrogen atom located at one of the 4 non-fused positions of the ring;

(3) X is selected from:  $=\text{C}(\text{O})$ ,  $=\text{C}(\text{NOR}^3)$ ,  $=\text{C}(\text{NNR}^4\text{R}^5)$ ,



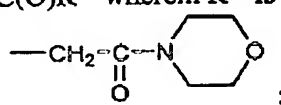
- (4)  $\text{M}^1$  is carbon;
- (5)  $\text{M}^2$  is selected from C or N;
- (6)  $\text{M}^3$  and  $\text{M}^4$  are independently selected from C or N;
- (7) Y is selected from: is  $-\text{CH}_2-$ ,  $=\text{C}(\text{O})$ ,  $=\text{C}(\text{NOR}^{20})$  (wherein  $\text{R}^{20}$  is as defined above), or  $=\text{C}(\text{S})$ ;

(8) Z is a  $\text{C}_1 - \text{C}_6$  alkyl group;

(9)  $\text{R}^2$  is a five or six-membered heteroaryl ring, said six-membered heteroaryl ring comprising 1 or 2 nitrogen atoms with the remaining ring atoms being carbon, and said five-membered heteroaryl ring containing 1 or 2 heteroatoms selected from: nitrogen, oxygen, or sulfur with the remaining ring atoms being carbon; said five or six membered heteroaryl rings being optionally substituted with 1 to 3 substituents independently selected from: halogen, hydroxyl, lower alkyl, lower alkoxy,  $-\text{CF}_3$ ,  $\text{CF}_3\text{O}-$ ,  $-\text{NR}^4\text{R}^5$ , phenyl,  $-\text{NO}_2$ ,  $-\text{CO}_2\text{R}^4$ ,  $-\text{CON}(\text{R}^4)_2$  wherein each  $\text{R}^4$  is the same or different,  $-\text{CH}_2\text{NR}^4\text{R}^5$ ,  $-(\text{N})\text{C}(\text{NR}^4\text{R}^5)_2$ , or  $-\text{CN}$ ;

(10)  $\text{R}^3$  is selected from:

- (a) hydrogen;
- (b) C<sub>1</sub> – C<sub>6</sub> alkyl;
- (c) aryl;
- (d) heteroaryl;
- (e) heterocycloalkyl;
- (f) arylalkyl;
- (g)  $-(CH_2)_e-C(O)N(R^4)_2$  wherein each R<sup>4</sup> is the same or different,
- (h)  $-(CH_2)_e-C(O)OR^4$ ;
- (i)  $-(CH_2)_e-C(O)R^{30}$  wherein R<sup>30</sup> is a heterocycloalkyl group, or



- (j) -CF<sub>3</sub>; or
- (k) -CH<sub>2</sub>CF<sub>3</sub>;

wherein said aryl, heteroaryl, heterocycloalkyl, and the aryl portion of said arylalkyl are optionally substituted with 1 to 3 substituents selected from: halogen, -OH, -OCF<sub>3</sub>, -CF<sub>3</sub>, -CN, -N(R<sup>45</sup>)<sub>2</sub>, -CO<sub>2</sub>R<sup>45</sup>, or -C(O)N(R<sup>45</sup>)<sub>2</sub>, wherein each R<sup>45</sup> is independently selected from: H, alkyl, alkylaryl, or alkylaryl wherein said aryl moiety is substituted with 1 to 3 substituents independently selected from -CF<sub>3</sub>, -OH, halogen, alkyl, -NO<sub>2</sub>, or -CN;

(11) R<sup>4</sup> is selected from: hydrogen, C<sub>1</sub> – C<sub>6</sub> alkyl, aryl, alkylaryl, said aryl and alkylaryl groups being optionally substituted with 1 to 3 substituents selected from: halogen, -CF<sub>3</sub>, -OCF<sub>3</sub>, -OH, -N(R<sup>45</sup>)<sub>2</sub>, -CO<sub>2</sub>R<sup>45</sup>, -C(O)N(R<sup>45</sup>)<sub>2</sub>, or -CN; wherein R<sup>45</sup> is as defined above;

(12) R<sup>5</sup> is selected from: hydrogen, C<sub>1</sub> – C<sub>6</sub> alkyl, -C(O)R<sup>4</sup>, -C(O)<sub>2</sub>R<sup>4</sup>, or -C(O)N(R<sup>4</sup>)<sub>2</sub> wherein each R<sup>4</sup> is independently selected, and R<sup>4</sup> is as defined above;

(13) or R<sup>4</sup> and R<sup>5</sup> taken together with the nitrogen atom to which they are bound forms a five or six membered heterocycloalkyl ring;

(14) R<sup>6</sup> is selected from: alkyl, aryl, alkylaryl, halogen, hydroxyl, lower alkoxy, -CF<sub>3</sub>, CF<sub>3</sub>O-, -NR<sup>4</sup>R<sup>5</sup>, -NO<sub>2</sub>, -CO<sub>2</sub>R<sup>4</sup>, -CON(R<sup>4</sup>)<sub>2</sub> wherein each R<sup>4</sup> is the same or different, or -CN;

- (15) R<sup>12</sup> is selected from: alkyl, hydroxyl, alkoxy, or fluoro;
- (16) R<sup>13</sup> is selected from: alkyl, hydroxyl, alkoxy, or fluoro;
- (17) a is 0 to 2;
- (18) b is 0 to 2;

- (19) c is 0 to 2;
- (20) e is 0 to 5;
- (21) m is 1 or 2;
- (22) n is 1, 2 or 3; and
- (23) p is 1, 2 or 3, with the proviso that when  $M^3$  and  $M^4$  are both nitrogen,

then p is 2 or 3;

in combination with an effective amount of an  $H_1$  receptor antagonist.

Claims 58-61 have been canceled.